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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,120	03/06/2007	Anil Koul	GPC0104PUSA	6426
22045	7590	11/16/2009		
BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			EXAMINER YOUNG, SHAWQUA	
			ART UNIT	PAPER NUMBER
			1626	
			MAIL DATE	DELIVERY MODE
			11/16/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,120	<b>Applicant(s)</b> KOUL ET AL.	
	<b>Examiner</b> SHAWQUIA YOUNG	<b>Art Unit</b> 1626	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6,7 and 38-54 is/are pending in the application.
- 4a) Of the above claim(s) 39-43 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 38 is/are allowed.
- 6) ☒ Claim(s) 6, 44,45, 48-50 is/are rejected.
- 7) ☒ Claim(s) 46,47 and 51-54 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 6, 7 and 38-54 are currently pending in the instant application. Applicants have cancelled claims 1-6 and 8-37 and added new claims 44-54 in an amendment filed on August 11, 2009. Claims 6, 44, 45, 48, 49 and 50 are rejected, claims 46, 47, and 51-54 are objected, claims 7 and 38 are allowable and claims 39-43 are withdrawn from consideration.

#### **I. *Response to Arguments/Remarks***

Applicants' amendment, filed on August 11, 2009, has overcome the rejection of claims 1-8 and 38 under 35 USC 102(e) as being anticipated by Gutschow, et al.; Showalter, et al.; Bourdais, et al.; Jagodzinski, et al.; Ram, et al.; Grinev, et al.; Kapustina, et al.; Bridges, et al.; Shah, et al.; Hallas, et al.; Chursinova, et al., Callahan, et al. or Luk'yanchuk, et al.; the rejection of claim 8 under 35 USC 112, first paragraph as failing to comply with the enablement requirement; the rejection of claims 1-6 under 35 USC 112, second paragraph as being indefinite and the objection of claims 2-58 as being dependent upon a rejected based claim. The above rejections and objection have been withdrawn.

#### **II. *Rejection(s)***

##### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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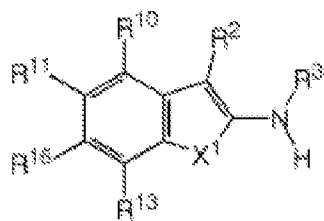
A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

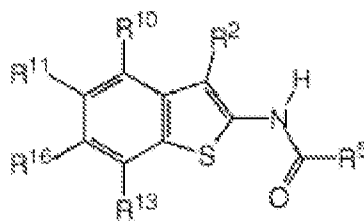
The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 6 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by *Callahan, et al.* (RN 341028-86-2, CAPLUS). The instant elected invention claims a product with the formula (V!a)-(VId)

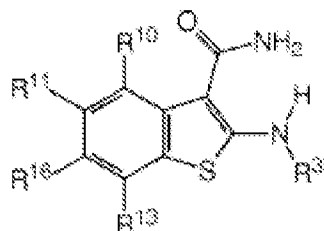
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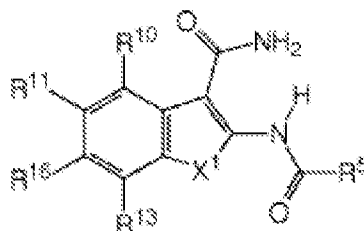
( VIa )



( VIb )



( VIc )



( VIId )

wherein all variables

are as defined in claim 44.

The *Callahan, et al.* reference teaches benzothienyl derivatives such as 2-amino-benzo[b]thiophene-3-carboxamide. This species of compound anticipates the genus compound of the instant invention, wherein the genus structure and its definitions are stated above.

### **35 USC § 103 - OBVIOUSNESS REJECTION**

The following is a quotation of 35 U.S.C. § 103(a) that forms the basis for all obviousness rejections set forth in this Office action:

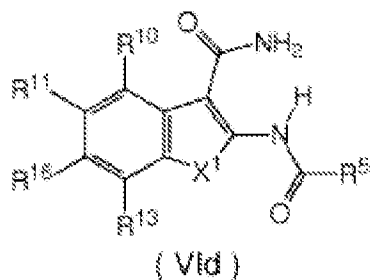
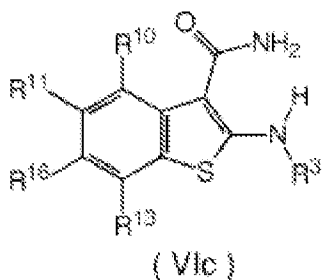
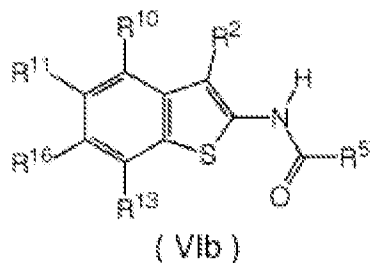
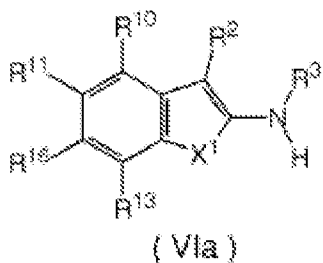
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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*Graham v. John Deere Co.* set forth the factual inquiries necessary to determine obviousness under 35 U.S.C. § 103(a). See *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Specifically, the analysis must employ the following factual inquiries:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 45 and 48-50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Callahan, et al.* Applicants claim a compound of formula



wherein all variables are as defined in claim 44.

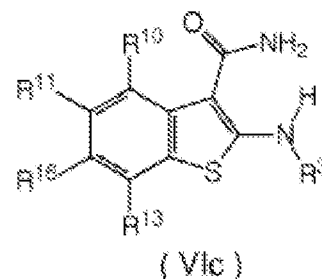
**The Scope and Content of the Prior Art (MPEP §2141.01)**

*Callahan, et al.* teaches 2-aminobenzothiophene-3-carboxamides as NF-kb inhibitors such as 2-amino-6-(4-fluorophenyl)benzo[b]thiophene-3-carboxamide and 2-[(aminocarbonyl)amino]-benzo[b]thiophene-3-carboxamide.

**The Difference Between the Prior Art and the Claims (MPEP §2141.02)**

The difference between the prior art of *Callahan, et al.* and the instant invention is that there is homologous subject matter. One difference between the prior art and the instant invention is that the phenyl ring of the benzothiophene group is unsubstituted whereas the phenyl ring of the benzothiophene group in the instant compounds could be substituted with a methyl group. Thus, the difference between the prior art and the instant compounds would be a Me vs. H.

**Prima Facie Obviousness-The Rational and Motivation (MPEP §2142-2413)**



Applicants are claiming a compound of the formula  
wherein specifically R<sup>3</sup> is hydrogen and one of R<sup>10</sup>, R<sup>11</sup>, R<sup>13</sup> and R<sup>16</sup> can be a methyl.  
The prior art reference of *Callahan, et al.* teaches the compound 2-

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[(aminocarbonyl)amino]-benzo[b]thiophene-3-carboxamide.

In In re Druey, 319 F. 2d 237, 138 USPQ 39 (C.C.P.A. 1963), it was well established that the substitution of methyl for hydrogen on a known compound is not a patentable modification absent unexpected or unobvious results. For example, it is obvious to prepare a methyl substituted phenyl group when the art teaches a unsubstituted cyclopropyl group with a reasonable expectation of success. Specifically, a methyl substituted phenyl group and an unsubstituted phenyl group are considered homologues and are obvious absent unexpected results. Therefore, it would have been prima facie obvious to one having ordinary skill in the art at the time the invention was made to prepare adjacent homologs based on the teachings of the working examples in the prior art. A strong prima facie obviousness has been established.

### III. Objections

#### Dependent Claim Objections

Dependent Claims 46, 47, and 51-54 are objected to as being dependent upon a rejected based claim. To overcome this objection, Applicant should rewrite said claims in an independent form and include the limitations of the base claim and any intervening claim.

### IV. Conclusion



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawquia Young whose telephone number is 571-272-9043. The examiner can normally be reached on 7:00 AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Shawquia Young/

Examiner, Art Unit 1626